



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/814,844

03/30/2004

Jonathan J. Hull

20412-08497

6502

76137 7590 03/12/2009

RICOH/FENWICK  
SILICON VALLEY CENTER  
801 CALIFORNIA STREET  
MOUNTAIN VIEW, CA 94041

EXAMINER

STEVENS, ROBERT

ART UNIT

PAPER NUMBER

2162

NOTIFICATION DATE

DELIVERY MODE

03/12/2009

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

PTOC@FENWICK.COM  
gsueoka@fenwick.com  
nmorad@fenwick.com

<b>Office Action Summary</b>	<b>Application No.</b> 10/814,844	<b>Applicant(s)</b> HULL ET AL.	
	<b>Examiner</b> ROBERT STEVENS	<b>Art Unit</b> 2162	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 18 December 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-6,8,10,12-22,25,27-29,31,33-41,44 and 45 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6,8,10,12-22,25,27-29,31,33-41,44 and 45 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>20090108, 20090206</u> .                                      | 6) <input type="checkbox"/> Other: _____                          |

**DETAILED ACTION**

1. The Office substantially maintains the previous rejections of the claims under 35 USC §103(a) and adds an informality objection to claim 25, in light of the amendment.

***Response to Arguments***

2. Applicant's arguments filed 12/18/2008 have been fully considered but they are not persuasive.

Regarding the previous rejection of the claims under 35 USC §103(a), Applicant argues on pages 8-10 that the claims were improperly rejected because the Graham reference is available under 35 USC §102(e) only.

The Office respectfully disagrees. The Graham patent reference US 6369811 was issued on Apr. 9, 2002, approximately 6 months before the filing dates of provisional application 60/506411 and 60/506263 (i.e. Sep. 23, 2003). See the Supplemental Application Data Sheet filed 10/30/2007 deleting priority claims to all applications (except the provisional applications).

Therefore, Graham is available as a 35 USC §102(a) reference, and properly applied in the previous rejections of the claims under 35 USC §103(a).

It is further noted that any citation to specific, pages, columns, lines, or figures in the prior art references and any interpretation of the references should not be considered to be limiting in any way. A reference is relevant for all it contains and may be relied upon for all that

Art Unit: 2162

it would have reasonably suggested to one having ordinary skill in the art. In re Heck, 699 F.2d 1331, 1332-1333, 216 USPQ 1038, 1039 (Fed. Cir. 1983) (quoting In re Lemelson, 397 F.2d 1006, 1009, 158 USPQ 275, 277 (CCPA 1968)).

The Office also notes MPEP § 2144.01, that quotes In re Preda, 401 F.2d 825, 159 USPQ 342, 344 (CCPA 1968) as stating "in considering the disclosure of a reference, it is proper to take into account not only specific teachings of the reference but also the inferences which one skilled in the art would reasonably be expected to draw therefrom." Further MPEP 2123, states that "a reference may be relied upon for all that it would have reasonably suggested to one having ordinary skill the art, including nonpreferred embodiments. Merck & Co. v. Biocraft Laboratories, 874 F.2d 804, 10 USPQ2d 1843 (Fed. Cir.), cert. denied, 493 U.S. 975 (1989).

For at least these reasons, the Office asserts the rejections of the claims as set forth below.

***Continued Examination Under 37 CFR 1.114***

3. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 12/18/08 has been entered.

***Information Disclosure Statement***

4. The information disclosure statement filed 2/6/2009 fails to comply with 37 CFR 1.98(a)(2), which requires a legible copy of each cited foreign patent document; each non-patent literature publication or that portion which caused it to be listed; and all other information or that portion which caused it to be listed. It has been placed in the application file, but the information referred to therein has not been considered. An English translation copy of the cited non-patent literature document C1 was not included with the information disclosure statement, and therefore not considered.

***Claim Objections***

5. **Claim 25 is objected to** because of the following informalities: There appears to be a spelling error on line 3 of the claim, which recites “a features~~s~~ extraction technique”. Emphasis added. Line 4 of the claim references “the feature extraction technique”. (It is also noted that claim 1 recites substantially similar limitations, recites “a feature extraction technique”.) Appropriate correction is required. See MPEP 608.01(m).

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. **Claims 1-6, 8, 10, 12-22, 25, 27, 31, 33-41 and 44-45 are rejected under 35 U.S.C.**

**103(a)** as being unpatentable over Scott R. Klemmer et al. (“Books With Voices: Paper Transcripts as a Tangible Interface to Oral Histories”, CHI 2003, Fort Lauderdale, FL, Apr. 5-10, 2003, pp. 89-96, hereafter referred to as “Klemmer”) in view of Graham et al. (US Patent No. 6,369,811, filed Sep. 9, 1998 and issued Apr. 9, 2002, hereafter referred to as “Graham”).

**Regarding independent claim 1:** Klemmer teaches *A computer system for generating a representation of time-based media, the system comprising: a feature extraction module for: extracting, using a feature extraction technique, features from the time-based media, the feature extraction technique specified by a document format specification file;* (See Klemmer page 92 in the top paragraph of the right column discussing the creating of an MPEG-2 video from a video source.) *and generating a media representation of the time-based media that represents the extracted features;* (See Klemmer page 92 in the top paragraph of the right column discussing the making of corresponding JPEG thumbnails.) *a formatting module communicatively coupled to the feature extraction module, the formatting module for: formatting the media representation according to layout parameters specified by the document*

*format specification file;* (See Klemmer page 92 in the top paragraph of the right column discussing the creating of a paper layout from a time stamped transcript.) *wherein the formatted media representation includes a graphical representation of a timeline and a plurality of user-selectable identifiers indicating locations on the timeline corresponding to the extracted features.* (See Klemmer page 91 in the last paragraph of the right column discussing the adding of time code information to the print format. See also page 92 Fig. 3 showing barcodes linking chronological sections of a book to A/V data and page 92 in the top paragraph of the right column discussing the creating of a paper layout from a time stamped transcript.)

However, Klemmer does not explicitly teach the remaining limitations as claimed. Graham, though, discloses *and a printer communicatively coupled to the formatting module, the printer for: printing the formatted media representation,* (See Graham Fig. 4A #408 and col. 5 lines 32-50 teaching the printing of a paper reader's assistant document having an imprinted thumbnail and teaching additional information as being a "discussion" of user interests.)

It would have been obvious to one of ordinary skill in the art at the time of the invention to apply the teachings of Graham for the benefit of Klemmer, because to do so allowed a designer to implement a mechanism to personalize a document for a particular user, as taught by Graham in the Abstract. These references were all applicable to the same field of endeavor, i.e., annotation of paper documents with electronic information.

**Regarding claim 2:** Klemmer teaches *module further comprises content recognition software for recognizing features in the time-based media*. (See Klemmer page 92 in the top paragraph of the right column discussing the creating of an MPEG-2 video from a video source.)

**Regarding claim 3:** Klemmer does not explicitly teach the remaining limitations as claimed. Graham, though, discloses *processing logic for controlling a printer driver interface associated with the printer*. (See Graham col. 6 lines 4-7 discussing the use of Postscript printing.)

**Regarding claim 4:** Klemmer does not explicitly teach the remaining limitations as claimed. Graham, though, discloses *processing logic for controlling a printer console on the printer*. (See Graham col. 6 lines 4-7 discussing the use of Postscript printing.)

**Regarding claim 5:** Klemmer teaches *wherein the feature extraction module is further adapted to generate the media representation in digital format*. (See Klemmer page 92 in the top paragraph of the right column discussing the creating of an MPEG-2 video from a video source.)

**Regarding claim 6:** Klemmer teaches *wherein the feature extraction module is further adapted to generate the media representation in paper format*. (See Klemmer page 92 Fig. 3 and the top paragraph in the right column teaching a video paper system.)



**Regarding claim 8:** Klemmer teaches *wherein at least one of the user-selectable identifiers comprises a barcode printed on a document displaying the media representation.*

(See Klemmer page 92 Fig. 3 showing the incorporation of barcodes on a video paper system document.)

**Regarding claim 10:** Klemmer teaches *wherein the barcode on the document can be scanned to play time-based media associated with the extracted features on a display device.*

(See Klemmer page 89 Abstract and page 92 in the 1<sup>st</sup> paragraph under “**Hardware**” discussing barcode scanning and video playback.)

**Regarding claim 12:** Klemmer teaches *wherein the graphical representation includes audio content displayed as an audio waveform timeline.* (See Klemmer page 92 Fig. 3 showing barcodes associated with Voices augmented paper transcripts in the context of the bottom paragraph in the right column discussing the adding of barcodes to time code metadata information.)

**Regarding claim 13:** Klemmer teaches *wherein the timeline includes markers along its length that correspond to user-selected segments of the time-based media.* (See Klemmer page 92 Fig. 3 showing barcode markers associated with Voices augmented paper transcripts in the context of the bottom paragraph in the right column discussing the adding of barcodes to time code metadata information.)

**Regarding claim 14:** Klemmer teaches *wherein the timeline includes markers along its length that correspond to segments of audio content, the segments being defined by a search for particular features within the time-based media.* (See Klemmer page 92 Fig. 3 showing barcodes associated with Voices augmented paper transcripts in the context of the bottom paragraph in the right column discussing the adding of barcode markers to time code metadata information.)

**Regarding claim 15:** Klemmer teaches *wherein the timeline includes markers along its length that correspond to segments of media content, at least one of the markers having text information describing the segment of media content.* (See Klemmer page 92 Fig. 3 showing barcodes and associated textual passages.)

**Regarding claim 16:** Klemmer teaches *wherein the timeline includes markers along its length that each correspond to a segment of the time-based media, at least one of the markers having timestamp information describing the segment of the time-based media.* (See Klemmer page 92 Fig. 3 showing barcodes associated with Voices augmented paper transcripts in the context of the bottom paragraph in the right column discussing the adding of barcodes to time code metadata information.)

**Regarding claim 17:** Klemmer teaches *wherein the media representation includes a header describing the time-based media*. (See Klemmer page 91 bottom paragraph in the right column discussing the placement of metadata in a header.)

**Regarding claim 18:** Klemmer teaches *wherein the feature extraction module is further adapted to generate the media representation is generated according to format specifications included in the document format specification file*. (See Klemmer page 92 top paragraph in the right column discussing the creation of a paper layout based upon a transcript.)

**Regarding claim 19:** Klemmer teaches *wherein the format specifications included in the document format specification comprise a number of user-definable fields specifying a format of a graphical representation of the time-based media*. (See Klemmer page 92 top paragraph in the right column discussing the creation of a paper layout based upon a transcript.)

**Regarding claim 20:** Klemmer teaches *wherein the format specifications included in the document format specification comprise a number of user-definable fields specifying a layout of the media representation*. (See Klemmer page 92 top paragraph in the right column discussing the creation of a paper layout based upon a transcript.)

**Regarding claim 21:** Klemmer teaches *wherein the format specifications included in the document format specification comprise a number of user-definable fields specifying the*

*media content markers included in the media representation.* (See Klemmer page 92 top paragraph in the right column discussing the creation of a paper layout based upon a transcript.)

**Regarding claim 22:** Klemmer teaches *wherein the format specifications included in the document format specification comprise a number of user-definable fields specifying the feature extraction techniques to apply to the time-based media.* (See Klemmer page 92 in the top paragraph in the right column discussing the creation of MPEG-2 and the use of a layout transcript.)

**Regarding independent claim 25:** Klemmer teaches *A method for generating a representation of time-based the method comprising: extracting, using a features extraction technique, features from time-based media, the feature extraction technique specified by a document format specification file;* (See Klemmer page 92 in the top paragraph of the right column discussing the creating of an MPEG-2 video from a video source.) *generating a media representation of the time-base media that represents the extracted features;* (See Klemmer page 92 in the top paragraph of the right column discussing the making of corresponding JPEG thumbnails.) *formatting the media representation according to layout parameters specified by the document format specification file;* (See Klemmer page 92 in the top paragraph of the right column discussing the creating of a paper layout from a time stamped transcript.) *and wherein the formatted media representation includes a graphical representation of a timeline and a plurality of user-selectable identifiers indicating locations on the timeline corresponding to*

*the extracted features.* (See Klemmer page 91 in the last paragraph of the right column discussing the adding of time code information to the print format. See also page 92 Fig. 3 showing barcodes linking chronological sections of a book to A/V data and page 92 in the top paragraph of the right column discussing the creating of a paper layout from a time stamped transcript.)

However, Klemmer does not explicitly teach the remaining limitations as claimed. Graham, though, discloses *printing the formatted media representation*, (See Graham Fig. 4A #408 and col. 5 lines 32-50 teaching the printing of a paper reader's assistant document having an imprinted thumbnail and teaching additional information as being a "discussion" of user interests.)

It would have been obvious to one of ordinary skill in the art at the time of the invention to apply the teachings of Graham for the benefit of Klemmer, because to do so allowed a designer to implement a mechanism to personalize a document for a particular user, as taught by Graham in the Abstract. These references were all applicable to the same field of endeavor, i.e., annotation of paper documents with electronic information.

**Regarding claim 27:** Klemmer does not explicitly teach the remaining limitations as claimed. Graham, though, discloses *wherein extracting features from the time-based media further comprises performing keyword searching on the time-based media.* (See Graham col. 7 lines 50-65 discussing the use of keywords and keyphrases.)

**Regarding claim 31:** Klemmer teaches *wherein the graphical representation includes audio content displayed as an audio waveform timeline*. (See Klemmer page 92 Fig. 3 showing text data displayed, the particular data chosen to display having been an obvious variant. See also page 92 Fig. 3 showing barcodes associated with Voices augmented paper transcripts in the context of the bottom paragraph in the right column discussing the adding of barcodes to time code metadata information.)

**Regarding claim 33:** Klemmer teaches *wherein at least one of the user-selectable identifiers comprises a barcode printed on a document displaying media representation*. (See Klemmer page 92 Fig. 3 showing barcodes printed on a video paper document.)

**Regarding claim 34:** Klemmer teaches *wherein the barcode on the document can be scanned to play time-based media associated with the extracted features on a display device*. (See Klemmer page 92 in the 1<sup>st</sup> paragraph in the right column under “**Hardware**” discussing the use of a barcode scanner.)

**Regarding claim 35:** Klemmer teaches *further comprising generating markers along the timeline, the markers corresponding to user-selected segments of the time-based media*. (See Klemmer page 92 Fig. 3 showing barcodes, in the context of page 91 in the bottom paragraph in the right column discussing the adding of timecode metadata.)

**Regarding claim 36:** Klemmer teaches *further comprising generating markers along the timeline, at least one of the markers corresponding to features extracted from the time-based media*. (See Klemmer page 92 Fig. 3 showing barcodes associated with Voices augmented paper transcripts in the context of the bottom paragraph in the right column discussing the adding of barcode markers to time code metadata information.)

**Regarding claim 37:** Klemmer teaches *further comprising generating markers along the timeline, at least one of the markers including text information describing the time-based media*. (See Klemmer page 92 Fig. 3 showing barcodes and associated textual passages.)

**Regarding claim 38:** Klemmer teaches *further comprising generating markers along the timeline, at least one of the markers including timestamp information describing the time-based media*. (See Klemmer page 92 Fig. 3 showing barcodes associated with Voices augmented paper transcripts in the context of the bottom paragraph in the right column discussing the adding of barcodes to time code metadata information.)

**Regarding claim 39:** Klemmer teaches *wherein printing the formatted media representation further comprises printing a header describing the time-based media*. (See Klemmer page 91 bottom paragraph in the right column discussing the placement of metadata in a header.)

**Regarding claim 40:** Klemmer teaches *wherein printing the formatted media representation further comprises generating a representation in digital format*. (See Klemmer page 92 in the top paragraph of the right column discussing the creating of an MPEG-2 video from a video source.)

**Regarding claim 41:** Klemmer teaches *wherein printing the formatted media representation further comprises printing a representation in paper format*. (See Klemmer page 92 Fig. 3 showing “Books with Voices augmented paper transcripts”.)

**Regarding claim 44:** Klemmer teaches *further comprising applying a barcode generation algorithm to render a barcode image including identifier information*. (See Klemmer page 92 Fig. 3 showing barcodes that link to further information, it being implied that such information requires an identifier for the purposes of storing/locating that information.)

**Regarding claim 45:** Klemmer teaches *further comprising applying a barcode algorithm to render a barcode image including timestamp information*. (See Klemmer page 92 top paragraph in the right column discussing the creation of a paper layout based upon a transcript.)



8. **Claims 28-29 are rejected under 35 U.S.C. 103(a)** as being unpatentable over Scott R. Klemmer et al. (“Books With Voices: Paper Transcripts as a Tangible Interface to Oral Histories”, CHI 2003, Fort Lauderdale, FL, Apr. 5-10, 2003, pp. 89-96, hereafter referred to as “Klemmer”) in view of Graham et al. (US Patent No. 6,369,811, filed Sep. 9, 1998 and issued Apr. 9, 2002, hereafter referred to as “Graham”) and Ponceleon et al. (US Patent Application Publication No. 2003/0187642, filed Mar. 29, 2002 and published Oct. 2, 2003, hereafter referred to as “Ponceleon”).

**Regarding claim 28:** Klemmer does not explicitly teach the remaining limitations as claimed. Ponceleon, though, discloses *wherein extracting features from the time-based media further comprises performing speech recognition on the time-based media*. (See Ponceleon Abstract and paragraph [0003] discussing the use of automatic speech recognition for discovering salient sections in a speech transcription.)

It would have been obvious to one of ordinary skill in the art at the time of the invention to apply the teachings of Ponceleon for the benefit of Klemmer in view of Graham, because to do so enabled a designer to implement a system to automatically discover salient segments in a speech transcript, as taught by Ponceleon in the Abstract. These references were all applicable to the same field of endeavor, i.e., automation information retrieval.

**Regarding claim 29:** Klemmer does not explicitly teach the remaining limitations as claimed. Ponceleon, though, discloses *wherein extracting features from the time-based media*

Art Unit: 2162

*further comprises performing event detection on the time-based media.* (See Ponceleon paragraph [0007] discussing the detection of events occurring in the news.)

***Conclusion***

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

***Non-Patent Literature***

Roschelle, Jeremy, et al., "VideoNoter: A Productivity Tool for Video Data Analysis", Behavior Research Methods, Instruments & Computers, Vol. 23, No. 2, © 1991, pp. 219-224.

Boreczky, John, et al., "An Interactive Comic Book Presentation for Exploring Video", CHI Letters, Vol. 2, Issue 1, Apr. 1-6, 2000, pp. 185-192.

Buchanan, M. Cecelia, et al., "Multimedia Documents as User Interfaces", INTERCHI '93, Amsterdam, The Netherlands, Apr. 24-29, 1993, pp. 527-528.

Nelson, Les, et al., "Palette: A Paper Interface for Giving Presentations", CHI '99, May 1999, pp. 1-8.

Wellner, Pierre, "Interacting with Paper on the DigitalDesk", Communications of the ACM, Vol. 36, no. 7, Jul. 1993, pp. 87-96.

Harada, Komei, et al., "Anecdote: A Multimedia Storyboarding System with Seamless Authoring Support", Multimedia '96, Boston, MA, © 1996, pp. 341-351.

Mackay, Wendy, et al., "Augmenting Reality: Adding Computational Dimensions to Paper", Communications of the ACM, Vol. 36, no. 7, Jul. 1993, pp. 96-97.

Makedon, Fillia, et al., "Multimedia Authoring, Development Environments and Digital Video Editing", Dartmouth College Technical Report PCS-TR94-231, © 2001, pp. 1-24.

Mackay, Wendy, et al., "Video Mosaic: Laying Out Time in a Physical Space", Multimedia '94, San Francisco, CA, Oct. 1994, pp. 165-172.

Tonomura, Yoshinobu, et al., "VideoMAP and VideoSpaceIcon", INTERCHI '93, Amsterdam, The Netherlands, Apr. 24-29, 1993, pp. 131-136 and 544.

***US Patent Application Publications***

Hull et al	2005/0229107
Crow et al	2003/0146927

***US Patents***

Hull et al	7,263,659
Barnett et al	6,381,614
French et al	6,266,053
Bolle et al	6,892,193

***Contact Information***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert Stevens whose telephone number is (571) 272-4102. The examiner can normally be reached on M-F 6:00 - 2:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John E. Breene can be reached on (571) 272-4107. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Robert Stevens/  
Examiner  
Art Unit 2162

March 8, 2009